



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,763	01/21/2005	Bernd Rudiger Stober	W1.1931 PCT-US	4037

7590 02/02/2007
Douglas R Hanscom
Jones Tullar & Cooper
P O Box 2266 Eads Station
Arlington, VA 22202

EXAMINER

AKANBI, ISIAKA O

ART UNIT	PAPER NUMBER
----------	--------------

2877

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/521,763

Applicant(s)

STOBER, BERND RUDIGER

Examiner

Isiaka O. Akanbi

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14 and 16-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Amendment

The amendment file 14 November 2006 has been entered into this application. Claim 15 is cancelled. Claims 28-29 have been added.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14, 16-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Matsumoto et al. (6,064,477) in view of Tullis et al. (6,838,687 B2)

Claims 14 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto in view of Tullis. The reference of Matsumoto teaches of a device/method for inspecting material of claims 14 and 25, comprising a sensor device (51/551), an illumination device (2/20/3/30), at least first and second light sources (21/201/31/301) in said illumination device, a first inspection light emission of a first color emitted by said first light source, and a second inspection light emission of a second color emitted by said second light source, said first and second colors being different from each other (col. 7, line 30-47)(col. 8, line 46-50), at least first and second color channels in said single sensor device (51/551), each of said at least first and second color channels being matched to said first and second inspection lights emissions from said first and second light sources, said at least first and second color channels being adapted to receive said first and second inspection light emissions that are at least one of passed through and reflected by the material and to record said first and second inspection light emissions together (col. 21, line 35-38) and an evaluation device (54) adapted to separately process image content of each of said at least first and second color channels (figs. 1, 23, 24 and 25)(col. 20, line 25-42) and suggested having third and fourth light sources (col. 4, line 34-38) and plurality of beams of light having different wavelengths (col. 7, line 33-35). The

reference of Matsumoto is silent regarding the device being a single sensor device. The use of a single sensor device to detect multiple/different light sources with multiple/different wavelength is known in the art, as evident by Tullis (22)(fig. 1A). It would have been obvious to one having ordinary skill in the art at the time of invention to use a bending mirror to direct the transmitted/reflected beam to the same detector to detect two or more different wavelengths from multiple light sources for economic purpose, further it would have been obvious to one having ordinary skill in the art at the time of invention to use a bending mirror to direct the transmitted/reflected beam from the sample to the same detector to detect the two or more different wavelengths for the purpose of making the system compact.

As to claim 16, Matsumoto and Tullis disclose everything claimed, as applied to claim 14 above, in addition the reference of Matsumoto discloses at least first and second inspection light emissions are substantially monochrome light color (col. 16, line 59-61).

As to claim 17, Matsumoto and Tullis disclose everything claimed, as applied to claim 14 above, in addition the reference of Matsumoto discloses at least one of said emission's color and said emission's bandwidth of each said inspection light is matched to a transmission curve of said sensor device (col. 5, line 66-col. 6, line 1-14).

As to claim 18 and 19, Matsumoto and Tullis disclose everything claimed, as applied to claim 14 above, in addition the reference of Matsumoto discloses sensor device that is a color line camera and sensor device that is a CCD camera (col. 29, line 34-col. 30, line 1-37).

As to claim 20, Matsumoto and Tullis disclose everything claimed, as applied to claim 14 above, in addition the reference of Matsumoto discloses sensor device (51/551) that has first, second and third color channels (col. 4, line 28-38)(col. 5, line 66-col. 6, line 1-10) wherein said illumination device (2/20/3/30) has first, second and third light sources (21/201/31/301) and wherein each first, second and third light sources emit first, second and third inspection light emissions matched to properties of said first, second and third color channels (fig. 1)(col. 6, line 60-col. 7, line 1-2).

As to claims 21 and 22, Matsumoto and Tullis disclose everything claimed, as applied to claim 14 above, in addition the reference of Matsumoto discloses at least first and second light sources (21/201/31/301) are arranged at first and second different positions relative to the material and wherein said at least first and second light sources are each displaceable (figs. 1 and 35).

Art Unit: 2877

As to claims 23 and 24, Matsumoto and Tullis disclose everything claimed, as applied to claim 14 above, in addition the reference of Matsumoto discloses at least one of said at least first and second inspection light emissions passes through the material and another of said at least first and second inspection light emissions is reflected by the material and wherein at least one of said at least first and second inspection light emissions is reflected by the material at a first angle and at least a second of said at least first and second inspection light emissions is reflected by the material at a second angle (col. 20, line 25-42)(col. 7, line 57-col. 8, line 1-9).

As to claims 26 and 27, Matsumoto and Tullis disclose the claimed invention, as applied to claim 14 and 25 except for Matsumoto is silent regarding the material is a printed product including image information and providing the material as a printed product including image information. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). Further Tullis teaches that the material is a printed product including image information and providing the material as a printed product including image information (see abstract)(col. 1, line 8-25)(fig. 1A).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 28 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto et al. (6,064,477).

As regard to claim 28, Matsumoto discloses an optical quality sensing system for inspecting printed material having a first surface opposing a second surface comprising of the following:

a support (X, Y and Z stage)(13)(col. 18, line 44-56) adapted to orient and position printed materials (6) for inspection, said support including a light transmissive region or aperture

Art Unit: 2877

(fig. 1), a first inspection light source (21/201) emitting light having a first color component and positioned to emit light emissions onto said printed material's first surface, a second inspection light source (3/301) emitting light having a second color component and positioned to emit light emissions onto said printed material's first surface, a third inspection light source (21/201/3/301) emitting light having a third color component and positioned to emit light emissions through said support's light transmissive region and onto said printed material's second surface (figs. 20-21) (col. 4, line 34-38)(col. 6, line 62-col. 7, line 1-2)(col. 7, line 22-35) (figs. 1, 23, 24 and 25), first color component, said second color component and said third color component may be combined and a light sensor (4) adapted to separately sense and evaluate light emissions in said first color, said second color and said third color, and positioned proximate said printed material's first surface (figs. 23-25)(col. 20, line 25-42) and said light sensor is configured to receive first, second and third light emissions as reflected and transmitted from printed material's (6) first surface, and to generate a first, second and third light inspection signal in response thereto (see abstract)(figs. 6a-c)

As to claim 29, according to claim 28, Matsumoto discloses wherein said first color component is selected from a group comprising red, green and blue by using CCD camera for detector (col. 29, line 34-col. 30, line 1-37).

Additional Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references listed in the attached form PTO-892 teach of other prior art device/method for inspecting material that may anticipate or obviate the claims of the applicant's invention.

De Man (5,304,813) reference further discloses a single sensor device (fig. 1).

Response to Arguments

Applicant's arguments/remarks, see pages 1-10, filed 14 August 2006, with respect to the rejection(s) of claim(s) 14-27 under 35 U.S.C. 101, and 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of claim amendment.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

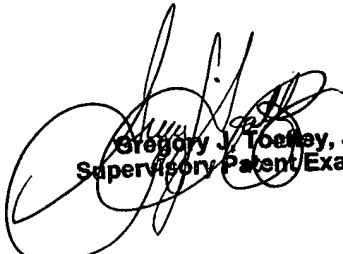
Fax/Telephone Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isiaka Akanbi whose telephone number is (571) 272-8658. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on (571) 272-2059. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isiaka Akanbi
January 24, 2007


Gregory J. Toatley, Jr.
Supervisory Patent Examiner